Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application. Please amend the claims as follows:

Listing of Claims:

1. (Currently Amended) A method for reporting latency information as perceived by a client in a client server system, the method comprising:

dispatching a first request from the client to a server, ~~said~~ the first request specifying a remote procedure call (RPC);

in response to the first request dispatched from the client to the server, receiving a first response from the server, wherein the first response corresponds to a result of the RPC specified by the first request;

in response to the received result of the RPC specified by the first response, measuring a ~~latency information~~ time delay from the client's dispatch of the first request to the client's receipt of the first response from the server, wherein the time delay is a number of milliseconds between sending the first request and receiving the first response;

appending the ~~latency information~~ time delay to a header of a second request from the client to the server; and

dispatching, from the client to the server, the second request with the header ~~appended with the latency information from the client to the server~~, ~~said~~ the second request ~~including~~specifying ~~another~~ RPC different from the RPC in the first request.

2. (Original) The method of claim 1, wherein the client is a messaging client, and wherein the server is a messaging server.

3.-8. Canceled.

9. (Previously Presented) The method of claim 1, wherein the client is an email client, and wherein the server is an e-mail server.

10.   (Currently Amended) A software program embodied on a computer ~~readable~~ storage medium, wherein the software program is executable to perform the method of claim 1.

11.   (Withdrawn)   A method for determining remote procedure call (RPC) performance in a client server system, the method comprising:

sending, from a client, a plurality of RPCs to a server;

receiving, from the server, a result for each of the plurality of RPCs sent to the server, said result being generated by the server;

in response to the received result for each of the plurality of RPCs, monitoring on the client a status of each of the plurality of RPCs sent to the server;

appending information regarding the status of the RPC to at least one subsequent RPC that is sent to the server, said subsequent RPC being different from the plurality of the RPCs;

generating aggregate statistics on the server regarding RPC performance of the server as perceived by the client based upon the status; and

generating an alert if the aggregate statistics exceed a particular threshold indicative of problematic RPC performance.

12.   (Currently Amended) A computer-implemented method, comprising:

sending a first request from a client to a server, said first request specifying a remote procedure call (RPC);

recording, at the client, a request initiation time for the first request;

receiving, at the client, a first response from the server corresponding to a result of the RPC specified by the first request;

in response to the received result of the RPC, recording, at the client, a response received time for the first response;

calculating a round trip network_latency ~~for the first request/response pair~~ comprising a difference between the response received time for the first response and the request initiation time for the first request, the round trip network latency comprising a

3

number of milliseconds between recording the request initiation time for the first request and recording the response received time for receiving the first response; and

  sending a second request from the client to the server, the second request comprising performance data and ~~another~~ RPC different from the RPC specified by the first request ~~and performance data, and~~ the performance data comprising the round trip network latency ~~for the first request/response pair~~.

13.-20. Canceled.

21. (Currently Amended) The method according to claim 12, wherein the performance data further comprises client server communications session invariant performance data context, and the performance data context compris[[ing]]es at least one performance data context identifier.

22. (Previously Presented) The method according to claim 21, wherein the performance data context further comprises one or more of the following:

  a client computer system host name;

  a client user name;

  a client network adaptor name;

  a client network adaptor speed; and

  a client network protocol address.

23. (Previously Presented) The method according to claim 22, wherein the performance data context further comprises one or more of the following:

  a server computer system host name;

  a server network domain name; and

  a server type.

24. (Previously Presented) The method according to claim 23, wherein the performance data context further comprises one or more of the following:

a globally unique identifier (GUID) associated with a client computer operating system process; and

information regarding the client computer operating system process.

25. (Original) The method according to claim 24, wherein the performance data context further comprises a globally unique identifier (GUID) associated with a client server communications session.

26. (Original) The method according to claim 12, wherein the second request further comprises an indication of at least one service desired of the server by the client.

27. (Currently Amended) A computer~~-readable~~ storage medium having thereon computer executable instructions for performing the method according to claim 12.

28. (Withdrawn) A computer-implemented method, comprising:

sending a first request from a client to a server, said first request specifying a remote procedure call (RPC);

receiving a first response from the server, wherein the first response corresponds to a result of the RPC specified by the first request;

recording, at the client, an error condition corresponding to the first request; and

sending a second request from the client to the server, and the second request comprising: another RPC different from the RPC in the first request, an indication of at least one service desired of the server by the client, and performance data, wherein the performance data comprises the error condition corresponding to the first request.

29. (Withdrawn) The method according to claim 28, further comprising receiving the second request at the server; parsing the performance data from the second request; classifying the first request based on the error condition corresponding to the first request; and updating at least one computer system memory resident performance data accumulator associated with the request class.

30. (Currently Amended) A computer-implemented method, comprising:

sending a first request from a client to a first server, said first request specifying a remote procedure call (RPC);

recording, at the client, a request initiation time for the first request;

receiving, at the client, a first response from the first server corresponding to a result of the RPC specified by the first request;

in response to the received result of the RPC, recording, at the client, a response received time for the first response;

calculating a round trip network latency for the first request/response pair comprising a difference between the response received time for the first response and the request initiation time for the first request; and

sending a second request from the client to a second server, the second request comprising another RPC different from the RPC specified by the first request and performance data, and the performance data comprising the round trip network latency for the first request/response pair.

31. (Original) The method according to claim 30, further comprising:

receiving the second request at the second server;

parsing the performance data from the second request; and

updating, with the performance data, at least one computer system memory resident performance data accumulator associated with the first server.

32. (Currently Amended) A computer-implemented method, comprising:

sending a first request from a client to a server, said first request specifying a remote procedure call (RPC);

recording, at the client, a request initiation time for the first request;

receiving, at the client, a first response from the server corresponding to a result of the RPC specified by the first request;

in response to the received result of the RPC, recording, at the client, a response received time for the first response;

calculating a round trip <u>network</u> latency for the first request/response pair comprising a difference between the response received time for the first response and the request initiation time for the first request;

storing, at the client, performance data associated with the first request/response pair and a performance data storage time, the performance data comprising the round trip <u>network</u> latency for the first request/response pair;

sending a second request from the client to the server, said second request specifying another RPC different from the RPC specified by the first request; and

if, a difference between a request initiation time for the second request and the storage time for the performance data associated with the first request/response pair is less than a maximum performance data age threshold, ~~then~~ incorporating the performance data associated with the first request/response pair into the second request.

33.   (Original) The method according to claim 32, further comprising receiving the maximum performance data age threshold from the server.

34.   (Withdrawn) A computerized client system, comprising:

a performance data store;

a performance data measurement module configured to, at least: generate performance data concerning requests from the client system and corresponding responses to the computerized client system, wherein the generated performance data and the requests form an incoming stream; and store the generated performance data in the performance data store;

a server performance data preference store;

a performance data stream parse module configured to, at least, parse the incoming data stream for server performance data preferences and store them in the server performance data preference store, said incoming data stream including generated performance data and requests from the computerized client system; and

a performance data stream format module configured to, at least, format and insert performance data from the performance data store into an outgoing data stream in accordance with server performance data preferences.

35.   (Withdrawn) The system of claim 34, further comprising: a performance data context map capable of maintaining, for each performance data context, a performance data context identifier to performance data context association; a performance data contextualize module configured to, at least: instantiate at least one performance data context; and for each performance data context, make a performance data context identifier to performance data context association entry in the performance data context map.

36.   (Withdrawn) The system of claim 35, wherein the performance data stream format module is further configured to, at least: format and insert performance data context independently from other performance data into an outgoing data stream; and replace performance data context with its associated performance data context identifier, as specified in the performance data context map.

37.   (Withdrawn) The system of claim 34, wherein the incoming data stream is buffered by the client system in a buffer with a fixed size, and wherein the outgoing data stream is buffered by the client system in a buffer with a fixed size.

38.   (Withdrawn) A computerized server system, comprising: a performance data stream parse module configured to, at least, parse client-generated performance data from an incoming data stream, said incoming data stream including client-generated performance data and a remote procedure call (RPC) request; at least one server system memory resident performance data accumulator; and a performance data report module configured to, at least, update the at least one server system memory resident performance data accumulator from performance data corresponding to the parsed client-generated performance data.

39.   (Withdrawn) The system of claim 38, wherein the client-generated performance data comprises performance data context, the performance data stream parse module is further configured to, at least, parse performance data context from the incoming data

stream, and the system further comprises: a performance data context map capable of maintaining, for each parsed performance data context, a performance data context identifier to performance data context association; and a performance data contextualize module configured to, at least, for each parsed performance data context, make a performance data context identifier to performance data context association entry in the performance data context map.

40. (Withdrawn) The system of claim 38, further comprising: a server performance data preference store; and a performance data stream format module configured to, at least, format and insert server performance data preferences from the server performance data preference store into an outgoing data stream.

41. (Withdrawn) The system of claim 38, further comprising: a performance data event log; a performance data event trigger database comprising at least one criteria set corresponding to criteria for triggering a performance data event; and wherein the performance data report module is further configured to, at least: for each criteria set in the performance data event trigger database, determine if the criteria set is met as a consequence of the parsed client-generated performance data; and for each criteria set that is met: generate a performance data event; and enter the performance data event in the performance data event log.

42. (Currently Amended) A computer-readable storage medium having stored thereon a data structure, comprising:

a performance data remote procedure call (RPC) extension tag included in an RPC request for prefacing network performance data associated with a client, said performance data RPC extension tag comprising:

a performance data format version field;

at least one performance data format flag;

a performance data size field; and

an uncompressed performance data size field; and

at least one performance data block relating to the performance data RPC extension tag, said at least one performance data block comprising:

a performance data block header, comprising:

a performance data block size field;

a performance data block format version field; and

a performance data block type field; and

a performance data block body comprising the network performance data associated with the client, wherein the performance data RPC extension tag and the at least one performance data block are incorporated in an RPC in each request/response cycle of the transmission of the RPC.

43.   (Currently Amended) The computer-readable storage medium of claim 42, wherein the at least one performance data format flag is selected from a group consisting of compress performance data and obfuscate performance data.

44.   (Currently Amended) The computer-readable storage medium of claim 42, wherein the performance data block body comprises: a variable byte array storage area; and at least one string type field comprising an offset to a location in the variable byte array storage area where the value of the string type field is stored.

45.   (Currently Amended) The computer-readable storage medium of claim 42, wherein the performance data block type field indicates that the performance data block body contains client information performance data context pertaining to a client in a client server network, and wherein the performance data block body comprises:

a client-generated client information performance data context identifier;

a name of a computer system hosting the client;

a name of a user utilizing the client;

a network protocol address associated with the client;

a name of a network adapter associated with the client; and

a speed of the network adapter associated with the client.

46.   (Currently Amended) The computer-readable storage medium of claim 42, wherein the performance data block type field indicates that the performance data block body contains server information performance data context pertaining to a server in a client server network, and wherein the performance data block body comprises:

a client-generated server information performance data context identifier;

a name of the server;

a network domain name of the server; and

a server type associated with the server.

47.   (Currently Amended) The computer-readable storage medium of claim 42, wherein the performance data block type field indicates that the performance data block body contains client-generated performance data pertaining to a successful request/response pair between a client and a server in a client server network, and wherein the performance data block body comprises:

a client-generated request identifier associated with the successful request/response pair;

a round trip network latency corresponding to a difference between a time at which the client initiated the successful request/response pair and a time at which the client received the response; and

a server processing time corresponding to a difference between a time at which the server received the request of the successful request/response pair and a time at which the server initiated the response.

48.   (Currently Amended) The computer-readable storage medium of claim 47, wherein the performance data block size is 14 bytes.

49.   (Currently Amended) The computer-readable storage medium of claim 42, wherein the performance data block type field indicates that the performance data block body contains client-generated performance data pertaining to a failed request/response pair between a client and a server in a client server network, and wherein the performance data block body comprises:

a client-generated request identifier associated with the failed request/response pair;

a time to fail corresponding to a difference between a time at which the client initiated the failed request/response pair and a time at which the client determined that the request had failed; and

a failure code corresponding to a reason for the failure of the request.

50.   (Currently Amended) The computer-readable storage medium of claim 42, wherein the performance data block type field indicates that the performance data block body contains server performance data preference information for a server in a client server network, and wherein the performance data block body comprises:

an indication of whether to send client-generated performance data to the server pertaining to client communications with the server;

an indication of whether to send client-generated performance data to the server pertaining to client communications with other servers in the client server network; and

a performance data age threshold beyond which client-stored performance data should not be sent to the server.